

MICROMERIA BROWNEI AND ITS ALLIES (LABIATAE)

LLOYD H. SHINNERS

In 1903, Small recognized two species of *Micromeria* in the Southern United States: *M. pilosiuscula* in Texas (and Mexico) and *M. Brownei* in Florida (and the West Indies). In 1933, he recognized only one for the continental United States, the Florida plants being placed with the Texas ones under *M. pilosiuscula*. In attempting to evaluate Small's conclusions, I found that some West Indian material (from the Bahamas and Hispaniola) is indeed very distinct from *pilosiuscula*, but the true *M. Brownei* (from Jamaica) does not differ significantly except in average size and geography. Some future monographer may prefer to establish a hierarchy of subspecies and varieties to accommodate all of these under one species name. I prefer to recognize separate, though admittedly closely related, species, one of them with three varieties. My immediate purpose has been merely to settle the nomenclature of the plant of the United States. As an interesting sidelight, it is possible to point out that in Florida it represents not a primarily West Indian element (it does not occur in the southern part of the state, and the plants of the Bahamas and Cuba are not the same), but a Texano-Mexican one.

All members of the group are small, commonly mat-forming weeds of damp places, with lavender or partly white corolla. This brief account is based on collections at Florida State University, the University of Florida, the Gray Herbarium (U.S. and West Indian only), the New York Botanical Garden, and Southern Methodist University, to whose several curators grateful acknowledgement is made.

KEY TO SPECIES AND VARIETIES

- 1a. Shortest calyx teeth $1/5$ — $1/6$ as long as entire calyx; margins of calyx teeth either glabrous or hispid-ciliate; larger leaf blades 5—20 mm. wide; plants of Cuba, Jamaica, Guatemala, Mexico, and the United States
- 2a. Margins of calyx teeth glabrous or rarely (one Jamaican collection) inconspicuously ciliate with hairs about 0.1 mm. long
- 3a. Plants of Jamaica; larger leaf blades 5—12 mm. wide, glabrous; pedicels 3—7 mm. long. 1a. *M. Brownei* var. *Brownei*
- 3b. Plants of continental North America; larger leaf blades up to 20 mm. wide, glabrous or pubescent; pedicels 3—15 mm. long
 - 1b. *M. Brownei* var. *pilosiuscula*
- 2b. Margins of calyx teeth hispid-ciliate with hairs 0.3—0.6 mm. long; plants of Cuba (rare) and Yucatan. . . . 1c. *M. Brownei* var. *ludens*

1b. Shortest calyx teeth $1/3$ as long as entire calyx; margins of calyx teeth prominently hispid-ciliate; larger leaf blades 4—6 (rarely — 11) mm. wide; plants of the Bahamas and Hispaniola

4a. Pedicels (except uppermost ones) 1.0—3.5 mm. long, shorter than the adjacent petioles; marginal hairs of calyx teeth spreading; Bahamas.....2. *M. bahamensis*

4b. Pedicels 3.0—6.5 mm. long, longer than the adjacent petioles; marginal hairs of calyx teeth incurved-ascending, subappressed; Hispaniola.....3. *M. domingensis*

1. M. BROWNEI (Swartz) Bentham, Lab. Gen. et Sp. p. 372. 1832—1836. (Not seen; quoted in DC., Prodr. 12: 223. 1848.) *Thymus Brownei* Swartz, Prodr. p. 89. 1788. Type locality: Jamaica. *Satureia Brownei* (Swartz) Briquet in Engler & Prantl, Nat. Pflanzenfam. Teil IV. Abt. 3a: 300. 1897. (As "*S. Brownii*," but this was not the spelling adopted by Swartz.)

1a. M. BROWNEI var. BROWNEI. Confined to Jamaica, at various altitudes, from 200 feet up to 2200 feet; 13 sheets examined (FLAS, GH, NY). All have glabrous calyx teeth except the following, on which these are more or less short-hispid-ciliate. Bluefields and vicinity; on wall, Bluefields Mountain, 700 m. alt., N. L. Britton & Arthur Hollick 1994, 6—7 March 1908 (NY). Flowering collections dated January, February, March, July, August, September.

1b. M. BROWNEI var. PILOSIUSCULA Gray, Syn. Fl. N.A. 2 pt. 1: 359. 1878. Type locality: near San Antonio, Bexar Co., Texas. *Satureia Brownei* var. *pilosiuscula* (Gray) Briquet in Engler & Prantl, Nat. Pflanzenfam. Teil IV. Abt. 3a: 300. 1897. *Micromeria pilosiuscula* (Gray) Small, Fl. S.E. U.S. pp. 1042, 1337. 1903. *Thymus xalapensis* H.B.K., Nov. Gen. (4to ed.) 2: 316—317. 1818. "In declivitate montium Mexicanorum soli oriente obversorum inter villam Pileta et urbem Xalapa, alt. 760 hex." (Vera Cruz, Mexico). *Micromeria xalapensis* (H.B.K.) Bentham, Lab. Gen. et Sp. p. 372. 1832—1836. (Not seen; quoted in DC., Prodr. 12: 223. 1848.)

Very variable as to stature, dwarf plants with glabrous leaves being hardly distinguishable from var. *Brownei* except by geography. Pubescent-leaved forms (intergrading with glabrous ones) occur in Texas and Mexico. At the northeastern extremity of its range (Florida, Georgia, Louisiana) only the glabrous form is found. This is evidently the end-product of selective migration from the west and southwest. Since var. *pilosiuscula* does not occur in the West Indies, and since it is absent from the southern part of Florida (where West Indian plants would normally be expected), it must be regarded as an unusual Texano-Mexican element in the flora of Florida. The general distribution of this variety, on the basis of specimens examined, is summarized by country and department or state, and for the United States by county. GUATEMALA. Alta Verapaz, Huehuetenango, Quiche. MEXICO. Jalisco, Nuevo Leon, San Luis Potosi, Sinaloa, Tabasco, Tamaulipas, Vera Cruz.

UNITED STATES. FLORIDA. Alachua, Bradford, Brevard, Clay, Flagler, Gadsden, Gilchrist, Hillsborough, Jackson, Lake, Levy, Orange, Osceola, St. Johns, Seminole, Volusia. GEORGIA. Decatur. LOUISIANA. St. Bernard. TEXAS. Aransas, Bexar, Brazoria, Cameron, Colorado. In flower in the United States from February to September, farther south apparently nearly all year.

1c. *M. BROWNEI* var. *ludens* Shinnars, var. nov. A var. *Brownei* recedit calycis dentibus hispido-ciliatis. HOLOTYPE: wayside, near Sabicu, Rangel, Sierra del Rosario, Pinar del Rio Province, Cuba, *Bro. Alain* 6137, January, 1957 (NY). PARATYPES (all NY): Cultivated, Est. Agronomica, Santiago de Vegas, Habana, Cuba, *J. Acuna* 19539, 5 Feb. 1955. Near Merida, Yucatan, Mexico, *Porfirio Valdez* 35, in 1896. Locality illegible ("Coym. . . Is."?), Yucatan, Mexico, *Gaumer* 109, ex Herb. Gray. The disjunct distribution between Cuba and Mexico suggests that of *Egletes viscosa*, especially f. *bipinnatifida* (cf. Shinnars, 1949).

2. *M. bahamensis* Shinnars, sp. nov. *M. Brownei* affinis. Caulis ad vel infra nodos pilosula. Folia perparva, petiolis puberulis, laminis glabris vel (imprimis facie superiore) parce hispidulis varie subintegris vel argute denticulatis, majoribus 4—6 mm. latis (rarissime 11 mm.). Pedicelli 1.0—3.5 mm. longi, plerumque petiolis breviores. Calyx 3.5—4.1 mm. longus profunde lobatus (dentibus minoribus calycis tertiam partem aequantibus), dentes longe patenter hispido-ciliati. Corolla extus pilosula. HOLOTYPE: Berry Islands, Lignum Vitae Cay, Bahama Islands, *N. L. Britton & C. F. Millspaugh* 2302, 2 February 1905 (GH; isotype, NY). A total of nineteen sheets has been examined (GH, NY). The species is apparently common and widespread in the Bahamas, in flower December to May and in August. With a single exception the specimens are remarkably uniform, with very small leaves. The exception, with blades up to 11 mm. wide, is *Britton & Millspaugh* 3114, sink holes near Georgetown, Great Exuma, 22—28 February 1905 (NY).

3. *M. domingensis* Shinnars, sp. nov. Praecedenti persimilis, differt pedicellis 3.0—6.5 mm. longis petiolos excedentibus, calycis dentibus subappresse hispido-ciliatis. HOLOTYPE: Civ. Santo Domingo, Cordillera Central, prov. de Azua, San Juan, El Varanjo, edge of brook, c. 800 m., Hispaniola, *E. L. Ekman* (*Mus. Bot. Stockholm Pl. Ind. Occ. N:O* H.13505), 8 September 1929 (GH). PARATYPE: Santo Domingo, Cordillera Central, prov. de la Vega, Constanza, edge of thickets in swamps, ca. 1200 m. *E. L. Ekman* (*Mus. Bot. Stockholm Pl. Ind. Occ. N:O* H. 13915), 25 October 1929 (NY). These are the only specimens seen. The altitude and flowering dates suggest physiological differences between this and *M. bahamensis*.

NAME OF DOUBTFUL APPLICATION

Micromeria stolonifera Benthams, Lab. Gen. et Sp. p. 371. 1832—1836. (Not seen; quoted in DC., Prodr. 12: 223. 1848.) Type locality: Mexico

("Nova Hispania"), Mocino et Sesse. "A. M. Brownei differt caulibus subfirmioribus acute tetragonis et foliis latioribus sessilibus, nec petiolo limbum aequante donatis. Rami et folia Gratiolam referunt. An *M. xalapensis* var. ? (v. s. olim in herb. Lamb.)" I have seen no collections bearing this name, and none that could be satisfactorily referred to it. Although petiole-length varies in *M. Brownei* var. *pilosiuscula*, the leaves are never really sessile. I am unable to identify Bentham's plant.

REFERENCES

- SHINNERS, LLOYD H. 1949. Revision of the genus *Egletes* Cassini north of South America. *Lloydia* 12: 239—247. (*E. viscosa* and f. *bipinnatifida*, pp. 244—245.)
 SMALL, JOHN KUNKEL. 1903. *Micromeria*. Fl. S.E. U.S. pp. 1042, 1337.
 ———. 1933. *Micromeria*. Man. S.E. Fl. p. 1168.